

WHAT IS CLAIMED IS:

1. A method of laminating copper foil onto a substrate of printed circuit board, the steps of the method comprising:

providing a substrate having an upper surface and a lower surface;

- coating isolating material onto the upper surface and the lower surface of the substrate;

performing a curing process to allow the isolating material to form isolating layers on the upper surface and the lower surface of the substrate; and

laminating metal foils onto the isolating layers formed on the upper and lower

- surfaces of the substrate.

2. The method of claim 1, wherein the substrate is made of flame-retardant epoxy-glass fabric composite resin (FR-4, FR-5) or bismaleimide-triazine (BT).

3. The method of claim 1, wherein the isolating material comprises liquid epoxy resin.

4. The method of claim 1, wherein the isolating material comprises polymer.

5. The method of claim 1, wherein the isolating material comprises polyimide.

6. The method of claim 1, wherein a thickness of the isolating layers is controlled by equipment parameters regardless of the type of the metal foil that is used.

7. The method of claim 1, wherein the metal foil comprises copper foil.

8. The method of claim 7, wherein the types of the copper foil comprise high profile copper foil, low profile copper foil or reverse copper foil.

10. The method of claim 1, wherein the step of coating the isolating material further comprises a rolling method.

11. The method of claim 1, wherein the step of coating the isolating material further comprises a spraying method.

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12. The method of claim 1, wherein the step of coating the isolating material further comprises a screen printing method.

13. The method of claim 1, wherein the step of laminating copper foil further comprises heating and pressurization processes to secure the metal foil onto the surfaces of the substrate.

5       14. A method of laminating copper foil onto a substrate of a printed circuit board, the steps of the method comprising:

10              providing a substrate having an upper surface and a lower surface;

            coating isolating material onto the upper surface and the lower surface of the substrate;

15              performing a curing process to allow the isolating material to form isolating layers on the upper surface and the lower surface of the substrate;

            laminating metal foils onto the upper surface and the lower surface of the substrate; and

20              performing heating and pressurization processes to secure the metal foils to the surfaces of the substrate.

15. The method of claim 14, wherein the substrate is made of flame-retardant epoxy-glass fabric composite resin (FR-4, FR-5) or bismaleimide-triazine (BT).

16. The method of claim 14, wherein the isolating material comprises liquid epoxy resin.

20 17. The method of claim 14, wherein the isolating material comprises polymer.

18. The method of claim 14, wherein the isolating material comprises polyimide.

19. The method of claim 14, wherein the metal foil comprises copper foil.

20. The method of claim 19, wherein the types of the copper foil comprise high profile copper foil, low profile copper foil or reverse copper foil.

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21. The method of claim 14, wherein the thickness of the adhesive layers is controlled by equipment parameters regardless of the type of the metal foil that is used.
22. The method of claim 14, wherein the step of coating the isolating material further comprises a rolling method.
- 5 23. The method of claim 14, wherein the step of coating the isolating material further comprises a spraying method.
24. The method of claim 14, wherein the step of coating the isolating material further comprises a screen printing method.

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